VOLU-SOL

SECTION 1: PRODU	CT AND COMPANY IDENTIFICATION		INHALATION: If b respiration. Consu	
PRODUCT NAME:	Acid Ethanol 90%		INGESTION: Do N	
SYNONYMS:	Acid Ethanol solution, Acid Ethanol	190	person. Rinse mou	
CATALOG CODES:	VXA		SKIN: Wash off with soap and	
MANUFACTURER:	Volu-Sol		EYE: Rinse thorou	ghly with nl
ADDRESS:	5095 West 2100 South Salt Lake City, UT 84120			Billy with bi
	Salt Lake City, 01 64120			SECT
EMERGENCY PHONE:	(800) 535-5053			
OTHER CALLS: FAX:	(801) 974-9474 (801) 974-9553		FLAMMABLE LIMI	IS IN AIR:
CHEMICAL FAMILY: CHEMICAL FORMULA:	-		FLASH POINT:	
PREPARED BY:	Volu-Sol			
			AUTOIGNITION TE	MPERATU
RECOMMENDED USE: Laboratory c	nemical		EXTINGUISHING N	/IEDIA: Use
RESTRICTIONS ON USE: Use as	recommended		dioxide	199
			FIRE FIGHTING PR	
SECTION 2:	HAZARD(S) IDENTIFICATION		NIOSH-approved s	
		1	pressure demand	
EMERGENCY OVERVIEW: GHS Classification:	Flammable Liquids (Ca	ategory 2)	FIRE AND EXPLOS	
GHS LABEL ELEMENTS:		100 BOI Y 27	FIRE AND EXPLOS	
		1		SECTION
Pictogram: Signal Word:	Danger		1998 - Alexandre - Ale	
Hazard Statement(s):	Danger		ACCIDENTAL RELE	
H225	Highly flammable liquid and vapou	r	vapours, mist or Evacuate personn	
Precautionary Statement(s):	Kana and from boots to be	flammer (hash	concentrations. Va	
P210	Keep away from heat/sparks/op surfaces. No smoking	pen flames/hot	if safe to do so. De	
P233	Keep container tightly closed		an electrically pro	
P240	Ground/bond container and receiv		disposal according and releases to so	
P241	Use explosion-proof electrical lighting/ equipment	l/ ventilating/	contact the US Coa	
P242	Use only non-sparking tools			
P243	Take precautionary measures	against static		SECT
2200	discharge		HANDLING AND S	TORAGE
P280	Wear protective gloves/ eye protection	rotection/ face	or mist. Use exp	
P303+P361+P353	IF ON SKIN (or hair): Remove/Take	off immediately	smoking. Take me	
		inse skin with	tightly closed in a	
P370+P378	water/shower In case of fire: Use dry sand, c	dry chemical or	carefully resealed	and kept up
15/01/5/0	alcohol-resistant foam for extinction			
P403+P235	Store in a well-ventilated place. Ke		INCOMPATIBILITE	S:
P501	Dispose of contents/container to waste disposal plant	o an approved		
OTHER HAZARDS: -		1. Sec. 1. Sec	SECT	TION 8: EXI
HMIS Classification:				
Health hazard:	2	2 States and a state of the sta	EXPOSURE LIMITS	
Chronic health hazard:	-		Commonweak	
Flammability:	3 0	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Component	CAS-N
Physical hazards: NFPA Rating:	U		Ethanol	64-17-
Health hazard:	2		L	
Fire: Boactivity Hazardy	3		VENTILATION SYS	TEM: Local
Reactivity Hazard:	0		below limits. Loc	al exhaust
SECTION 3: COMPOSI	ION/INFORMATION ON INGREDIEN	ITS	source, preventing document, Industr	
	040 10			
INGREDIENT	CAS NO. EC-NO.		PERSONAL RESPIR	
	Index-NC		feasible, a half-fa exposure limit, o	

64-17-5

200-578-6

603-002-00-5

SECTION 4: FIRST AID MEASURES

INHALATION: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

SKIN: Wash off with soap and plenty of water. Consult a physician

EYE: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

TION 5: FIRE-FIGHTING MEASURES Percentage by Volume Upper: -% Lower: -% RE: e water spray, alcohol-resistant foam, dry chemical or carbon S: In the event of a fire, wear full protective clothing and ned breathing apparatus with full face piece operated in the ositive pressure mode **RDS:** Use water spray to cool unopened containers N 6: ACCIDENTAL RELEASE MEASURES SURES: Use personal protective equipment. Avoid breathing re adequate ventilation. Remove all sources of ignition. areas. Beware of vapours accumulating to form explosive accumulate in low areas. Prevent further leakage or spillage roduct enter drains. Contain spillage, and then collect with cuum cleaner or by wet-brushing and place in container for egulations. US Regulations (CERCLA) require reporting spills and air in excess of reportable quantities. The number to National Response Center is (800) 424-8802 TION 7: HANDLING AND STORAGE Avoid contact with skin and eyes. Avoid inhalation of vapour oof equipment. Keep away from sources of ignition - No prevent the buildup of electrostatic charge. Keep container vell-ventilated place. Containers which are opened must be pright to prevent leakage Alkali metals, ammonia, oxidizing agents, peroxides POSURE CONTROLS/PERSONAL PROTECTION Reported in a time-weighted average (TWA) OSHA ACGIH ١o. Reference ppm mg/m³ ppm mg/m³ 1,000 1,900 1,000 1,900 7-5 TLV TLV PEL PEL al and/or general exhaust is recommended to keep exposure ventilation is preferred for control of the emissions at its on into the general work area. Please refer to the ACGIH tion: A Manual of Recommended Practices, for details exposure limit is exceeded and engineering controls are not

feasible, a half-face organic vapour respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier; whichever is lowest. A full-face piece organic vapour respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier; whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face, positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres

Ethanol (70-90%)

SKIN PROTECTION: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

EYE PROTECTION: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

BODY PROTECTION: Impervious clothing. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES		
APPEARANCE:	liquid	
ODOR:	-	
WATER SOLUBILITY:	completely soluble	
pH:	-	
BOILING POINT:	-	
MELTING POINT:	-	
VAPOR PRESSURE:	-	
SPECIFIC GRAVITY:	-	
MOLECULAR WEIGHT:	-	
DENSITY:	-	
VISCOSITY:	-	
REFRACTIVE INDEX:	-	
SECTIO	IN 10: STABILITY AND REACTIVITY	

CHEMICAL STABILITY:	Stable under recommended condit

: Stable under recommended conditions of use and storage

CONDITIONS TO AVOID: Heat, flames, ignition sources

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No data available

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:	
Acute Toxicity:	No data available
Skin/Eye Irritation:	No data available
Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen
ROUTES OF ENTRY:	Inhalation/Ingestion/Skin

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

Toxicity: No data available

Persistence and degradability: No data available

Mobility in soil: No data available

PBT/vPvB Results: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements. Dispose of as unused product

SECTION 14: TRANSPORT INFORMATION

US DOT	ΙΑΤΑ	IMDG/IMO
Shipping Name:	Shipping Name:	Shipping Name:
Ethanol solutions	Ethanol solutions	ETHANOL SOLUTION
Hazard Class:	Hazard Class:	Hazard Class:
3	3	3
UN Number:	UN Number:	UN Number:
1170	1170	1170
Packing Group:	Packing Group:	Packing Group:
II	II	II

SECTION 15: REGULATORY INFORMATION

SARA 302	-
SARA 313	-
SARA 311/312 Hazards	Fire hazard, Chronic Health Hazard
State	Right to know lists: MA: 64-17-5 PA: 64-17-5, 7732-18-5 NJ: 64-17-5, 7732-18-5 California Prop. 65 Components:

SECTION 16: OTHER INFORMATION

Disclaimer: The information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use, or disposal of the product.

